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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,236	10/19/2001	Eric Gaussier	07447.0061 (XeroxRef.No.	7611

7590 03/01/2007
Finnegan, Henderson, Farabow
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1300 I St., N.W.
Washington, DC 20005-3315

EXAMINER

NGUYEN, CAM LINH T

ART UNIT	PAPER NUMBER
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2161

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/982,236

Applicant(s)

GAUSSIER ET AL.

Examiner

CamLinh Nguyen

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/20/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2161

DETAILED ACTION

Response to Amendment

1. In view of the Appeal Brief filed on 10/20/2006, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

Amended
Apr 11/2007
SPR 1, TC 2103

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Claims 1 – 26 are currently pending for further processing.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckerman et al (U.S. 6,742,003 B2) in view of Fohn et al (U.S. 6,460,025 B1).

♦ As per claim 1, 8, 10, 12 – 16, 20 – 23,

Art Unit: 2161

Heckerman et al (U.S. 6,742,003 B2) discloses a method for clustering a plurality of documents (See the title of Heckerman) comprised of a plurality of clusters (see Fig. 3A - 3K), wherein each document includes a plurality of words (attributes) (col. 27, lines 67), the method comprising:

- “Accessing the document collection” corresponds to the collection storage component 801 (See Fig. 8, col. 19, lines 27 – 30 of Heckerman).
- “Performing a clustering process that creates a hierarchy of clusters that reflects a segregation of the documents in the collection based on the words included in the documents” corresponds to the clustering process that form the hierarchical tree (See Fig. 11, 15, col. 20, lines 29 – 49, col. 24, lines 65 – col. 25 lines 35, col. 28, line 1 of Heckerman). The segment of the document (see the abstract, col. 21, lines 61 – 64, col. 25, lines 36 – 47 of Heckerman)
- “Wherein the first and second clusters are associated with different paths of the hierarchy” See Fig. 7 of Heckerman where there is multiple paths in the hierarchy.
- “Storing a representation of the hierarchy of clusters in a memory” See Fig. 8, element 803, Fig. 15, col. 25, lines 15 – 17 of Heckerman.
- “Making the representation available to an entity in response to a request associated with the document collection” See Fig. 15, col. 26, lines 43 – 47 of Heckerman.

Heckerman does not clearly disclose “Wherein any document in the collection may be assigned to a first cluster in the hierarchy based on a first segment of the respective document, and the respective document may be assigned to a second cluster in the hierarchy based on a second segment of the respective document” Heckerman only mentions that the document has n attributes (col. 27, line 67), and based on the matches or those attribute settings, a document can

Art Unit: 2161

belong to multiple clusters in the hierarchical tree and therefore, forming a multi level hierarchical organizations (col. 5, lines 21 – 28 of Heckerman).

However, on the other hand, Fohn discloses a method for improving use browsing through hierarchies of information (see the abstract of Fohn). Fohn teaches that “entity relevance is calculated for the entities in the hierarchies, and this information is used to guide the user in his exploration (see the abstract of Fohn). Especially, Fohn teaches that “the entities e5 and e6 (elements 445 and 450 of Fig. 4) are common to the hierarchies of both these root nodes, and traversing from root node n1 to root node n4 would therefore not yield an empty solution state” (col. 14, lines 52 – 56 of Fohn). Clearly Fohn teaches that an entity can be placed in two different categories (or cluster or nodes). Fig. 4, Fohn discloses that entity e4 (445) can be belong to node n1 and n4. Fig. 6A, Fohn also disclose another example of entity 613, which can be belong to “group Portrait” and “Birthday” nodes depend on different perspective on the camera product set (col. 20, lines 51 – 60 of Fohn).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to apply the teaching of Fohn into the invention of Heckerman because the combination would “provide a powerful flexible technique for locating entities in a large information space using hierarchical navigation and browsing of these one or more hierarchies”. (Col. 24, lines 14 – 17 of Fohn). The combination system would enables a user to search for a solution meeting his selected constrains from a multi-perspective viewpoint, guiding him through ascent and descent in a hierarchy as well as lateral exploration and movement to other hierarchies (col. 24, lines 19 – 23 of Fohn).

Art Unit: 2161

- ◆ As per claims 2, 9, 11, 17 - 18, the combination of Heckerman and Fohn disclose:
 - “Assigning the document collection to a first class ... setting a probability parameter to an initial value ...determining ... first class” See Fig. 11, Fig. 15 and corresponding texts of Heckerman.
- ◆ As per claims 3, 19, the combination of Heckerman and Fohn disclose:
 - “Determining whether the first class has split into two child classes” See Fig. 11 where there are two categories in a set.
- ◆ As per claim 4, the combination of Heckerman and Fohn disclose:
 - “Repeating the step of determining for each document in the collection” See Fig. 11 of Heckerman.
- ◆ As per claims 5 – 7, the combination of Heckerman and Fohn disclose:
 - “Performing the clustering process” See Fig. 15 and corresponding texts.
- ◆ As per claims 24 - 25, the combination of Heckerman and Fohn disclose:
 - “Wherein the representation defines the probability of a document as the product of the probability of the (document, word) pairs it contains” (See Fig. 16 - 18 and associated texts of Heckerman).
- ◆ As per claim 26, the combination of Heckerman and Fohn disclose:
 - The form of probability model (See col. 2, lines 1 – 17, Fig. 6A – 6B of probability).

Response to Arguments

5. Applicant's arguments with respect to claims 1 - 26 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2161

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CamLinh Nguyen whose telephone number is (571) 272-4024.

The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571 – 273 – 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LN

Apu Mofiz
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SPE, TC 2161